

Postings: from the desk of Jim Brodrick

Like many of you, I'll be heading to Las Vegas next week for LIGHTFAIR International. Cosponsored by IES and IALD, LIGHTFAIR is now in its 21st year and, as the continent's biggest lighting trade show, brings together roughly 500 exhibitors and 20,000 lighting, design, architectural, and engineering professionals from all over the world. So it's not surprising that there'll be a ton of LED lighting products on display and, given the technology's relatively early stage, that they'll run the whole gamut in terms of quality – from those that are very good, to those that are not ready for prime time and may never be. And with the hype sure to be running hot and heavy – not just in terms of the sales patter, but also in much of the product literature – it won't be an easy task to separate the wheat from the chaff.

That's why DOE's solid-state lighting program will have its own booth at LIGHTFAIR. Unlike the vast majority of other exhibitors, we won't be selling anything. Instead, we'll be there to educate – to help attendees distinguish the good from the bad in terms of SSL products and applications. My team and I will be available throughout the show to answer questions, and we'll also be offering a series of free tutorials right there in the booth (#2121). Those tutorials will cover a wide range of SSL topics – from "How to Reduce the Risk of Specifying LEDs," to "Recent SSL Installations: The Good, the Bad, and the Ugly," to "Dimming and LEDs: Can this be a Happy Marriage?" I've also been invited to give a lunchtime keynote talk ("Solid-State Lighting: Preparing for the Opportunity") on May 11 at the LIGHTFAIR Institute/LIGHTFAIR Daylighting Institute, which offer continuing-

education programs during the two days prior to the opening of the show itself.

Solid-state lighting education is a top priority for DOE, which is why we've joined forces with Jack Curran of LED

Transformations. Known for his no-nonsense approach, Jack provides education and training to companies entering the SSL luminaire market. His seminar at this year's LIGHTFAIR,

"Smoke, Mirrors, & LEDs" (May 12 from 4:30-6:30), will review the current state of the SSL market and help people separate fact from hype when navigating LED lighting product specs.

While that seminar will be given under his own auspices, Jack will be giving similar talks on behalf of DOE at a number of other conferences throughout the year.

Jack's seminar and DOE's tutorials should give you a leg up as you try to make your way through the bewildering array of SSL products at LIGHTFAIR. But as you walk the floor, you'll do well to have your hype-detectors out and to ask a lot of tough questions. Here are some that will stand you in good stead – not just at LIGHTFAIR, but anytime you need to assess SSL products:

Input/Output:

- What are the delivered lumens at each correlated color temperature (CCT)? (Remember, flux and efficacy usually vary with CCT.)
- What is the input power?
- Do you have LM-79 photometric reports and IES files from an independent testing lab?

Color:

- What is the color rendering index (CRI) at each color temperature?
- How do you ensure color consistency among fixtures built

today or a year from now? Do you have test data demonstrating color stability over time?

- Does the thermal management system keep the LED junction temperature below specified maximums in all applications?
- May I see at least two samples of the same CCT?
- Were your chromaticity measurements performed according to LM-79 by an independent lab?
- Is there a written binning policy?

Life/Warranty:

- Is there a written end-of-life policy, and how will spares be made available?
- How long is the warranty, and what exactly is covered? Are components included? Is labor included?
- Has LM-80 testing been performed by your LED or LED module manufacturer, and what does it say about lumen maintenance? Do you have test data to verify that your system operates at a temperature and drive current consistent with those LM-80 test results?

LEDs:

- Whose LEDs are being used?

It's hard even for experts to stay up-to-date when a market is moving as fast as solid-state lighting is. The best policy is to gather as much information as possible, in order to make an informed decision. The questions I've provided should help you do just that. I look forward to seeing many of you at LIGHTFAIR booth #2121.

As always, if you have questions or comments, you can reach me at postings@lightingfacts.com.

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